We claim:

1. A suture locking assembly, comprising:

a housing;

a suture locking mechanism residing in the housing;

the suture locking mechanism comprising a non-locked position and a locked position;

the suture locking assembly being adapted so that a suture can pass through the housing and engage the suture locking mechanism; wherein

the suture would engage the suture locking mechanism such that the suture is capable of movement when the suture locking mechanism is in the non-locked position and the suture is relatively incapable of movement when the suture locking mechanism is in the locked position.

2. The assembly according to claim 1, wherein the suture locking mechanism changes from the non-locked position to the locked position by rotational movement.

3. The assembly according to claim 2, wherein the suture locking mechanism comprises a plurality of locking post, wherein

the plurality of locking posts are arranged such that they provide a substantially non-tortuous suture path when the suture locking mechanism is in the non-locked position; and

the plurality of locking posts are arranged such that they provide a substantially tortuous suture path when the suture locking mechanism is in the locked position.

4. The assembly according to claim 3, wherein

in the non-locked position, a first surface area of the plurality of locking posts is adapted to be in contact with a suture providing a first amount of frictional resistance to movement of the suture; and

in the locked position, a second surface area of the plurality of locking posts is adapted to be in contact with the suture providing a second amount of frictional resistance to movement of the suture.

5. The assembly according to claim 4, wherein the first surface area is less than the second surface area.

6. The assembly according to claim 4, wherein the suture locking mechanism rotates from the non-locked position to the locked position.

7. The assembly according to claim 4, wherein at least one of the plurality of locking posts comprises at least one of a textured surface, a ribbed surface, a grooved surface, a notched surface, and a channeled surface to increase the frictional resistance.

8. The assembly according to claim 3, wherein the suture locking posts comprise at least one of a triangular shape, a circular shape, a elliptical shape, a rectangular shape, a semi-circular shape, a semi-elliptical shape, a trapezoidal shape, and an irregular shape.

9. The assembly according to claim 2, wherein the rotational movement is caused by expansion of a collagen.

10. The assembly according to claim 2, wherein the suture locking mechanism comprises at least one channel through the housing.

11. The assembly according to claim 10, wherein

the at least one channel is arranged such that it provides a substantially non-tortuous suture path when the suture locking mechanism is in the non-locked position; and

the at least one channel is arranged such that it provides a substantially tortuous suture path when the suture locking mechanism is in the locked position.

12. The assembly according to claim 11, wherein the non-tortuous path is substantially parallel to the suture and the tortuous path has at least a portion that is substantially non-parallel to the suture.

13. The assembly according to claim 10, wherein the channel is substantially straight.

14. The assembly according to claim 10, wherein the channel has at least one bend.

15. The assembly according to claim 10, wherein the channel has a surface comprising at least one of a textured surface, a ribbed surface, a grooved surface, and a notched surface to increase the frictional resistance.

16. The assembly according to claim 10, wherein the channel comprises:

a wide end; and

a narrow end, wherein

when in the non-locked position the suture would reside generally in the wide end such that the channel would offer reduced resistance to movement of the suture, and wherein

when in the locked position the suture would reside generally in the narrow end such that the channel would offer increased resistance to movement of the suture.

17. The assembly according to claim 16, wherein the narrow end comprises at least one of a textured surface, a ribbed surface, a grooved surface, and a notched surface to increase the frictional resistance.

18. The assembly according to claim 16, wherein at least the narrow end is coated with at least one of an adhesive, a mastic, and a tape to increase the frictional resistance.

19. The assembly according to claim 1, wherein

the suture locking mechanism comprises an inner housing assembly; and

the inner housing assembly is arranged at least partially internal to the housing, such that

when the suture locking mechanism is in the non-locked position at least one gap exists between the housing and the inner housing assembly and the suture is relatively capable of movement and when the suture locking mechanism is in the locked position the at least one gap is closed and the suture is relatively incapable of movement.

20. The assembly according to claim 1, wherein the suture locking mechanism comprises:

at least one pair of mating surfaces, wherein

when in the non-locked position the at least one pair of mating surfaces are separated so that the suture is capable of movement and when in the locked position the at least one pair of mating surfaces are mated so that the suture is incapable of movement.

21. A vascular closure device, comprising:

an anchor;

a collagen;

a locking device; and

a suture coupled to the anchor and extending through the collagen and the locking device, wherein the locking device comprises:

a housing; and

at least one locking element, wherein the at least one locking element has a first orientation and a second orientation;

the first orientation providing the suture with a relatively non-tortuous path; and

the second orientation providing the suture relatively tortuous path.

22. The closure device according to claim 21, wherein the at least one locking element comprises at least one post.

23. The closure device according to claim 22, wherein the at least one post comprises a plurality of posts.

24. The closure device according to claim 22, wherein the at least one post includes at least one of a textured surface, a ribbed surface, a grooved surface, a notched surface, and a channeled surface to increase the frictional resistance.

25. The closure device according to claim 21, wherein the at least one locking element comprises a channel.

26. The closure device according to claim 25, wherein the first orientation provides a non-tortuous path substantially parallel to the suture path and the second orientation provides a tortuous path having at least a portion that is substantially non-parallel to the suture path.

27. The closure device according to claim 25, wherein the channel is substantially straight.

28. The closure device according to claim 25, wherein the channel includes at least one curve.

29. The closure device according to claim 25, wherein the channel includes a surface comprising at least one of a textured surface, a ribbed surface, a grooved surface, and a notched surface to increase the frictional resistance.

30. The closure device according to claim 25, wherein the channel comprises:

a wide end; and

a narrow end, wherein

in the first orientation the suture is relatively adjacent the wide end and in the second orientation the suture is relatively adjacent the narrow end.

31. The closure device according to claim 30, wherein the narrow end includes at least one of a textured surface, a ribbed surface, a grooved surface, a notched surface, an adhesive, a mastic, and a tape to increase the frictional resistance.

32. The closure device according to claim 21, wherein the at least one locking element comprises:

an inner housing assembly; wherein

in the first orientation the inner housing assembly is spaced apart from the housing to form a gap through which the suture passes and in the section orientation the inner housing assembly is adjacent the housing to close the gap.

33. A vascular closure device, comprising:

an anchor;

a collagen;

a suture; and

means for locking the suture, wherein

the suture coupled to the anchor and extending through the collagen and the means for locking the suture.

34. The vascular closure device according to claim 33 wherein the means for locking comprises:

a plurality of locking posts arranged along a suture pathway having at least a first orientation and a second orientation, such that in the first orientation the suture pathway is relatively non-tortuous and in the second orientation the suture pathway is relatively tortuous.

35. The vascular closure device according to claim 33, wherein the means for locking comprises a channel having a first orientation and a second orientation, such that in the first orientation the suture pathway is relatively non-tortuous and in the second orientation the suture pathway is relatively tortuous.

36. The vascular closure device according to claim 33, wherein the tortuous suture pathway is formed by a narrowing of the channel.

37. The vascular closure device according to claim 33, wherein the means for locking comprises:

a housing; and

an inner housing assembly having a first orientation and a second orientation, such that in the first orientation a gap is formed between the inner housing assembly and the housing and in the second orientation the inner housing assembly is flush with the housing.

38. A suture locking assembly, comprising:

a housing;

a plurality of locking posts residing in the housing;

the plurality of locking posts arranged to define a pathway for a suture;

the housing having a first orientation and a second orientation;

in the first orientation, the plurality of locking posts provide a non-tortuous pathway for the suture such that the suture can move relative to the housing; and

in the second orientation, the plurality of locking posts provide a tortuous pathway for the suture such that the suture is relatively immobile relative to the housing.

39. The suture locking assembly according to claim 38, wherein each of the plurality of locking posts has a first surface area in contact with the suture when in the first orientation and a second surface area in contact with the suture when in the second orientation.

40. The suture locking assembly according to claim 39, wherein the first surface area is less than the second surface area.

41. The suture locking assembly according to claim 39 wherein, the second surface area includes at last one of a textured portion, a ribbed portion, a grooved portion, a notched portion, a channeled portion, an adhesive portion, a mastic portion, and a taped portion.

42. The suture locking assembly according to claim 38, wherein a bio-resorbable material is used to make the suture locking assembly.

43. A suture locking assembly, comprising:

a housing;

a channel formed in the housing defining a suture pathway;

the housing having a first orientation and a second orientation;

in the first orientation, the channel provides a non-tortuous pathway for the suture such that the suture can move relative to the housing; and

in the second orientation, the channel provides a tortuous pathway for the suture such that the suture is relatively immobile relative to the housing.

44. The suture locking assembly according to claim 43, wherein the channel is straight.

45. The suture locking assembly according to claim 44, wherein the channel comprises at least one curved portion.

46. The suture locking assembly according to claim 43, wherein

a greater surface area of the channel is in contact with the suture when in the second orientation than when in the first orientation.

47. The suture locking assembly according to claim 43, wherein the channel comprises:

a wide end; and

a narrow end,

such that the suture would pass relatively closer to the wide end when the housing is in the first orientation and the suture would pass relatively closer to the narrow end when the housing is in the second orientation.

48. The suture locking assembly according to claim 47, wherein the narrow end is sized to snuggly fit the suture when in the second orientation and to provide resistance to suture movement.

49. The suture locking assembly according to claim 43, wherein a bio-resorbable material is used to make the suture locking assembly.

50. A suture locking assembly, comprising:

an external housing;

an internal space formed by the external housing;

the internal space having at least one lower surface

an inner housing assembly;

the inner housing assembly resides in part in the internal space;

the inner housing assembly having at least one mating surface corresponding the at least one lower surface; and

the inner housing assembly having a first position and a second position, wherein

in the first position, the inner housing assembly is suspended in the internal space such that the at least one mating surface does not abut the at least one lower surface and a suture is relatively moveable relative to the suture locking assembly; and

in the second position, the inner housing assembly rests on the external housing such that the at least one mating surface abuts the at least one lower surface and the suture is relatively immobile relative to the suture locking assembly.

51. The suture locking assembly according to claim 50, wherein the inner housing assembly includes a channel through which the suture can pass.

52. The suture locking assembly according to claim 50, further comprising:

a suture, and

the suture is threaded through the suture locking assembly such that passes adjacent the at least one mating surface, wherein

a tension on the suture causes the suture to apply an opening force on the at least one mating surface so the inner housing assembly does not abut the at least one lower surface.

53. The suture locking assembly according to claim 50, further comprising:

a collagen, wherein expansion of the collagen provides a force that tends to seat the at least one mating surface and the at least one lower surface.

54. The suture locking assembly according to claim 50, wherein a bio-resorbable material is used to make the suture locking assembly.

55. A suture locking assembly, comprising:

a housing;

the housing having a housing pathway for a suture

a locking device;

the locking device having a plurality of mating surfaces and a locking device pathway for the suture;

the locking device slidably coupled to the housing such that the locking device has at least a first position and a second position relative to the housing;

in the first position, the plurality of mating surfaces provide a gap through which the suture can move relative to the suture locking assembly; and

in the second position, the plurality of mating surfaces abut and grasp the suture so the suture is relatively immobile relative to the suture locking assembly.

56. The suture locking assembly according to claim 55, wherein

the housing further comprises at least a first hole corresponding to the first position and at least a second hole corresponding to the second position; and

the locking device comprises at least a tab capable of engaging at least the first hole in the first position and at least the second hole in the second position.

57. The suture locking assembly according to claim 56, wherein the housing comprises sidewalls, such that the sidewalls provide angle inwards from at least the first hole to at least the second hole.

58. The suture locking assembly according to claim 57, wherein the inward slope of the sidewalls provides a compressive force on the locking device tending to cause the plurality of mating surfaces to move towards each other.

59. The suture locking assembly according to claim 55, wherein a bio-resorbable material is used to make the suture locking assembly.

60. A device for locking sutures, comprising:

a tamping tube;

a housing;

the housing having a base and at least one flexible sidewall, the flexible sidewall being under a compressive force;

when unresisted, the compressive force causes at least one grasping surface on the at least one flexible sidewall to grasp a suture, and

the tamping tube releasably coupled to the at least one flexible sidewall to resist the compressive force an inhibit the at least one grasping surface from grasping the suture.

61. The device according to claim 60, wherein the at least one flexible sidewall comprises:

at least one pair of opposed flexible sidewalls;

each pair of the opposed flexible sidewalls have at least one grasping surface that abut when the compressive force is unresisted; and

each pair of the opposed flexible sidewalls having a seating surface, the seating surface for releasably coupling the tamping tube to the opposed flexible sidewalls.

62. The device according to claim 60, wherein a bio-resorbable material is used to make the device.